### NOTE 8 - DEPOSITS AND INVESTMENTS

This note provides information for all deposits and investments except those of the Common Cash pool, which are described in Note 5.

### **Deposits - Primary Government**

#### **Custodial Credit Risk**

In addition to equity in the Common Cash pool, some State funds maintain deposits with financial institutions. At present, only the Michigan Unemployment Compensation Funds (MUCF), the State Treasurer's Escrow and Paying Agent Fund (STEPAF), the Attorney Discipline System (ADS), and the Michigan Education Savings Plan (MESP) maintain these deposits and are exposed to custodial credit risk.

The Unemployment Insurance Agency administers, under the auspices of the federal government, the deposits of the MUCF. Tax collections are deposited in a clearing account as required by the Michigan Employment Security Act. Refunds are paid from that account; after the clearance of vouchers for refunds, all other money remaining in the fund, less amounts needed for refunds and judgments, must be deposited with the Secretary of the Treasury of the United States of America to the credit of the State in the Unemployment Trust Fund, established and maintained pursuant to Section 904 of the Social Security Act, 42 USC 1104. These deposits are maintained in the Federal Reserve Bank. At year-end, the carrying amount of these deposits, excluding those classified as investments, was negative \$28.6 million, which was caused by a net book cash overdraft. The bank balance of the deposits was \$17.0 million, of which \$.1 million was covered by federal depository insurance and \$16.9 million was book-entry securities held by pledging custodial banks at the Federal Reserve Bank in the State's name.

The deposits of the STEPAF were reflected in bank accounts at \$.1 million; these deposits were uninsured and uncollateralized, and were therefore exposed to custodial credit risk. This fund was administratively created and is used to account for investments held in escrow by the State Treasurer as fiscal agent for hospitals that have defeased Michigan State Hospital Finance Authority bonds. Michigan Compiled Laws Section 331.73g allows that the deposits shall be held in trust by the State Treasurer or by a financial institution qualified to serve as trustee pursuant to a trust agreement entered into between the authority issuing the refunding bonds and the State Treasurer or the financial institution providing for the investment and disposition of the funds.

The bank deposits of the ADS were \$.2 million; these deposits were not covered by Federal Deposit Insurance Corporation (FDIC) insurance, and were uninsured and uncollateralized. ADS has no policy to address custodial credit risk. It assesses financial institutions' risk levels; only those with acceptable levels of risk are used as depositories.

The deposits of the MESP were reflected in bank accounts at \$.8 million; \$.1 million was insured and \$.7 million was uninsured and uncollateralized. The level of risk for each financial institution is evaluated and assessed; only those with an acceptable estimated risk level are used as depositories. MESP has no other policy for controlling this risk.

# Investments - Primary Government

The following table shows the carrying amounts and fair values of investments of the primary government by investment type and in total at September 30, 2008:

	Primary	Government To	tal Inves	tments (In m	illions)					
Investment	R	tetirement	Co	ntribution		Other				
Types		Systems Fun		Funds	ds Funds			Total		
Commercial paper	\$	1,434.2	\$	-	\$	33.3	\$	1,467.6		
Money market accounts		-		336.6		372.4		709.1		
Government securities		3,487.7		-		712.3		4,200.0		
Corporate bonds and notes		5,260.4		56.4		761.7		6,078.5		
Mutual funds		95.3		1,707.4		1,093.6		2,896.4		
Pooled investment funds		-		2,076.3		-		2,076.3		
Equities		21,850.8		-	.2			21,851.0		
Guaranteed investment contracts		-		-		37.8		37.8		
Funding agreements		-		-		188.3		188.3		
International		4,632.0		-		-		4,632.0		
Real estate		5,765.5		-		-		5,765.5		
Alternative		9,670.0		-		-		9,670.0		
Accrued income		121.6		-		-		121.6		
Cash collateral		(236.3)		-		-	(236.3)			
Unsettled investments		192.1		-		-		192.1		

Total	\$	52,273.4	\$ 4,176.7	\$ 3,199.7	\$ 59,649.8
As reported on the Statement of Ne	t Assets				
Current investments Noncurrent investments	\$	420.6 918.6			
Total Investments	\$	1,339.3			

As reported on the Statements of Net Assets and Statement of Fiduciary Net Assets

	Current Investments		estments	 Total		
Governmental Activities Business-type activities Fiduciary funds	\$	311.5 109.2 432.8	\$ 667.2 251.5 57,877.7	\$ 978.6 360.6 58,310.5		
Total Investments	\$	853.4	 58,796.4	\$ 58,649.8		

The amounts above include losses, both realized and unrealized, that were largely the result of volatility in the financial markets, both nationally and world-wide. A substantial part of this volatility occurred toward the end of the fiscal year and continues into the current fiscal year. Despite decreases in fair value, very few principal losses have been sustained, and it is expected that many unrealized losses will be reversed.

#### Authority

Investment authority for the State's pension (and other employee benefit) trust funds is found in MCL Section 38.1133. This law allows the State Treasurer, as investment fiduciary, to make diverse investments in stocks, corporate and government bonds and notes, mortgages, real estate, venture capital, and other investments. The law has prudence standards and requires that the assets of a retirement system shall be invested solely in the interest of the participants and beneficiaries, and be made for the exclusive purpose of providing benefits to the participants and the participants' beneficiaries, and of defraying reasonable expenses of investing the assets of the State system.

The investment authority for other State funds is found in their enabling statutes and/or their bond resolutions where applicable. Except as noted below, the investments of the non-pension (and other employee benefit) trust funds are comprised mostly of United States government securities.

The State Building Authority (SBA) makes diverse investments as allowed by State statute and/or bond resolutions.

The Michigan Tobacco Settlement Finance Authority (MTSFA) is authorized to invest at its discretion, in any obligation, as it determines to be proper, in accordance with MCL Section 129.267.

Investments of MUCF represent their interest in a U.S. Treasury trust fund managed by the Secretary of the Treasury pursuant to Title IX of the Social Security Act, which includes deposits from the unemployment compensation funds of various states. MUCF is credited quarterly with trust fund investment earnings, as computed on a daily basis.

The deferred compensation plans are invested in mutual funds, U.S. Treasury strips, money market funds, and pooled investment funds. During fiscal year 2008, the deferred compensation plans' investment activities were managed by a private investment firm, which invests as directed by members of the plan.

# **Derivatives**

The State Treasurer is also authorized to invest a limited amount of pension (and other employee benefit) trust funds in derivatives to provide additional diversification. Such investments were made in swap agreements, Standard & Poor's 500 and Standard & Poor's Midcap Index and Bond Index futures contracts, and option contracts during the year. At September 30, 2008, there was \$2.9 billion invested in swap agreements, futures contracts, and option contracts. Derivatives are not used for speculation and they are not used to leverage the investment portfolios. Approximately 12% of the total pension (and other employee benefit) trust funds portfolio has been invested from time to time in swap agreements, futures contracts, and option contracts. The swap agreements pay quarterly to the counterparty, over the term of the swap agreements, interest indexed to the three month London Interbank Offered Rate (LIBOR), adjusted for an interest rate spread, on the notional amount stated in the agreements. United States domestic LIBOR-based floating rate notes and short-term investments were purchased in the open market to correspond with the notional amount of the swap agreements. The State Treasurer maintains custody and control of these floating rate notes and short-term investments. Swap agreements represent the largest category of derivatives used and total approximately 6.0% of the total portfolio.

#### **Investment Pools**

In July 2004, four state retirement systems' (State Employees', State Police, Public School Employees', and Judges') investments were contributed to an investment pool structure. A pro rata share of the entire pool represents each system's ownership of a portion of the investments in the State's pool.

# **Repurchase Agreements**

As a matter of administrative policy, the State Treasurer makes only limited use of investments in repurchase agreements. No such investments were outstanding at year-end.

#### Risk

GASB Statement No. 40, <u>Deposit and Investment Risk Disclosures</u>, requires certain disclosures regarding policies and practices with respect to the risks associated with investments. The custodial credit risk, the credit risk, the interest rate risk, the foreign currency risk and concentration of credit risk are discussed in the following paragraphs.

#### **Custodial Credit Risk**

Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty to a transaction, the State will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party.

Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government and are held by either the counterparty, or the counterparty's trust department or agent, but not in the government's name.

The State Treasurer does not have a policy for limiting custodial credit risk. As of September 30, 2008, government securities with a market value of \$25.0 million were exposed to custodial credit risk. These securities were held by the counterparty, not in the name of the retirement systems.

#### **Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Short-term investments for the pension funds are in prime commercial paper and follow the same policy described in Note 5 for this type of investment. The ratings at September 30 are included in the debt investments table.

All long-term fixed income investments, unless unrated, must be investment-grade at the time of purchase, unless specific requirements are met. Investment grade, as defined in MCL Section 38.1132 includes: investments in the top four major grades, rated by two national rating services. The State Treasurer's policy is to use Standard & Poor's (AAA, AA, BBB); and Moody's (Aaa, Aa, A, Baa). The primary government's debt investments as of September 30, 2008, are presented below. Note that securities backed by the full faith and credit of the United States Government are excluded.

Debt Investments (In millions)

Investment Type	Fair Value	Rating S & P	Fair Value	Rating Moody's	
Pension (and Other Employee Benefit) Trust Funds: Retirement Systems: Commercial paper	\$ 1,434.2	A-1	\$ 1,434.2	P-1	
Government securities					
U.S. agencies – sponsored	1,764.3	AAA	1,764.3	Aaa	
Corporate bonds & notes	646.8	AAA	537.0	Aaa	
·	688.6	AA	753.0	Aa	
	2,148.6	Α	2,093.1	Α	
	988.7	BBB	1,039.6	Baa	
	14.8	BB	17.4	Ba	
	3.7	В	1.2	В	
	.5	CCC	3.1	Caa	
	-	CC	.4	Ca	
	=	С	.1	С	
	.2	D	-	D	
	104.6	Unrated	151.7	Unrated	
International*	515.9	AAA	515.9	Aaa	
	1,333.8	AA	1,495.4	Aa	
	1,472.5	Α	1,460.2	Α	
	249.3	Unrated	99.9	Unrated	
Mutual funds**	32.0	AA	32.0	Aa	

Total	9.4 \$ 11,408.0		9.4 \$ 11,408.0	Ва
Deferred Compensation/Defined Contribution: Common trust funds	\$ .8 1,378.7 8.9	AA	\$ .8 1,378.7 8.9	Unavailable Unavailable Unavailable
Mutual funds	56.4	AA	56.4	Unavailable
Money market funds Total	336.6 1,781.4		336.6 1,781.4	Unavailable
Other Primary Government Funds: Commercial paper	\$ 33.3	A-1+	\$ 33.3	Unavailable
Government securities U.S. agencies - sponsored U.S. agencies - sponsored	300.4	AAA A-1+	262.3 38.1	Aaa Unavailable
Corporate bonds & notes	52.4 25.6 76.5 13.6	AA A	51.5 22.8 80.3 13.6	Aaa Aa A Baa
Guaranteed investment contract	37.8		37.8	Unavailable
Mutual funds	148.8 444.8		148.8 444.8	Aaa Aa
Treasury trust fund pool Total	35.3 \$ 1,168.5		35.3 \$ 1,168.5	Unrated
Total Primary Government	\$ 14,357.9	<u></u>	\$ 14,357.9	

<sup>\*</sup>International Investment types consist of domestic floating rate notes that are used as part of a swap strategy.

#### **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates of debt investments that will adversely affect the fair value of those investments.

The State Treasurer's policy states that cash equivalents are invested in short term fixed income securities with an average weighted maturity of less than one year to provide liquidity and safety of principal from capital market and default risk. At September 30, 2008, the fair value of prime commercial paper was \$1.4 billion; the weighted average maturity was 5 days.

The State Treasurer does not have a policy regarding interest rate risk for long-term debt investments. However, the pension trust funds are invested with a long-term strategy with no investments with a maturity of less than one year at the time of purchase. The goal is to balance higher returns while accepting minimum risk for the return. Analyzing the yield curve on individual securities as compared to U.S. Treasuries determines, in part, what is an acceptable risk for the return. Therefore, market conditions such as lower interest rates result in shorter duration; higher interest rates result in longer duration.

As of September 30, 2008, the pension trust funds had the following long-term debt securities:

### Pension (and Other Employee Benefit) Trust Funds Debt Securities (In millions)

Dobt Godantic	se (111 1111111e11e)	
	Fair	Duration
	Value	In Years
Retirement Systems:	·	
Governmental		
U.S. Treasury	\$ 103.2	6.8
U.S. Agency – Backed	2,221.0	5.4
U.S. Agency – Sponsored	1,764.3	4.1
Total Government	4,088.5	

<sup>\*\*</sup>Average Quality Rating.

Corporate	4,596.5	5.4
International* Corporate	3,571.5	-
Mutual fund - fixed income Total	41.4 \$12,298.0	4.1
Deferred Compensation/Defined Contribution: Common trust funds		
Traditional GIC/BICs	\$ 129.4	1.3
Buy and hold synthetics	9.4	.8
Global wrap synthetic contracts	1,084.4	3.2
SSgA daily bond market index fund	164.9	4.8
Total Common Trust	1,388.1	
Money market funds	336.6	.1
Mutual funds	56.4	8.4
Total	\$ 1,781.1	
Total Pension (and Other Employee Benefit) Trust Funds	\$ 14,079.1	

<sup>\*</sup>International debt securities contain domestic government and corporate securities as a part of their derivative strategies. The interest rates reset on a quarterly basis for these securities.

For the other primary government funds, fixed income is invested in a laddered, time-segmented structure allowing for intermittent cash flows as needed.

As of September 30, 2008, the primary government, excluding pension trust funds, had the following debt securities:

Other Funds
Debt Securities (In millions)

					Inves	stment Mat	urities	(In years)		
			L	ess						More
Investment Type	Fair	· Value	Th	Than 1		1 To 5		To 10	Than 10	
U.S. Treasury SLGS	\$	6.9	\$	6.9	\$	_	\$	-	\$	-
U.S. Treasury bonds		321.0		69.5		174.4		56.4		20.7
U.S. Bonds – backed		46.7		-		-		.6		46.1
U.S. Agency bonds – sponsored		300.4		25.0		72.8		170.9		31.8
Corporate bonds		168.2		1.0		67.1		80.7		19.4
Guaranteed investment contracts		37.8		-		-		-		37.8
Mutual funds		593.5								593.5
Total	\$	1,474.4	\$	102.3	\$	314.3	\$	308.5	\$	749.3

## **Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of investments or deposits. The pension trust funds invest in various foreign securities. These investments are limited to 20% of the total assets of the system, and are additionally limited to 5% of the outstanding foreign securities of any single issuer. No investment is allowed in a country that has been identified by the United States State Department as engaging in or sponsoring terrorism. These limits are set forth in MCL Sections 38.1133 and 38.1140. The types of foreign securities include equities, mutual funds, real estate, and limited partnerships. At September 30, 2008, foreign investments were approximately 7% of total assets of the systems; total foreign investments were \$3.8 billion. As of September 30, 2008, the pension (and other employee benefits) trust funds held the following investments subject to foreign currency risk:

Pension (and Other Employee Benefit) Trust Funds
Foreign Currency Risk (In millions)

	FU	reign Current	y Kisk (II		,							
			Market Value (In U.S. Dollars)									
						Equities - International						
Currency Retirement Systems:	Country		Alternative Investments**		Equities		uities	Deriv	atives*			
Americas Dollar	Canada	\$	_	\$	_	\$	6.2	\$	_			
Peso	Mexico	Ψ	-	Ψ	52.6	Ψ	-	Ψ	-			
Real	Brazil		-		.4		-		-			

Europe					
Euro	European Union	976.8	81.3	37.0	(97.2)
Franc	Switzerland	-	79.5	3.7	(16.6)
Krona	Sweden	-	-	1.1	(4.0)
Krone	Denmark	-	-	1.4	(3.8)
Krone	Norway	-	-	.9	(4.9)
Sterling	United Kingdom	39.3	.9	18.7	(100.6)
Asia/Pacific	-				
Dollar	Australia	-	-	4.5	(42.0)
Renminbi	China	-	9.2	-	-
Dollar	Hong Kong	-	-	.9	(11.0)
Yen	Japan	4.5	112.2	11.1	(59.4)
Dollar	Singapore	-	-	1.6	(5.3)
Won	South Korea	-	-	-	(25.1)
Middle East					
Shekel	Israel	-	.6	-	-
Mutual Funds					
Various	Various	 746.0	 40.5	 1,906.1	 
Total		\$ 1,766.5	\$ 377.3	\$ 1,993.3	\$ (369.9)
Deferred Compensation	on/Defined Contribution:	 	 _	 	 , , ,
Mutual Funds					
Various	Various	 	 472.6	 	 
Total		\$ 1,766.5	\$ 849.8	\$ 1,993.3	\$ (369.9)

<sup>\*</sup>International derivatives' market value exposure to foreign currency risk is the net amount of unrealized gains and unrealized losses. Maturity dates on these investments range from October 2008 through September 2011, with an average maturity of 1.8 years. For more information, see the derivatives section of this note.

#### **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributable to the magnitude of a government's investments with a single issuer.

Other than obligations issued that are assumed or guaranteed by the United States, its agencies, or United States government-sponsored enterprises, the pension systems are prohibited by MCL 38.1137 from investing in more than 5% of the outstanding obligations of any one issuer or investing more than 5% of a system's assets in the obligations of any one issuer.

At September 30, 2008, there were no investments in any single issuer more than 5% of the system's assets, nor were there any investments totaling more than 5% of the obligations of any one issuer, other than U.S. Government Securities as described above.

Pension trust fund investments represent 94.6% of the total investments of the primary government. Other large holders of investments were the State Lottery Fund (SLF), MESP, and the Michigan Natural Resources Trust Fund (MNRTF).

SLF investments, \$321.0 million, are all in the form of zero coupon U.S. Treasury bonds. These investments are held to provide funding for deferred prize awards.

# **Securities Lending Transactions**

Under the authority of MCL Section 38.1133, the State lends securities to broker-dealers and other entities for collateral that will be returned for the same securities in the future. The custodian is not liable for any losses unless there is negligence or willful misconduct on its part. State statutes allow the State to participate in securities lending transactions and the State has, by way of an Agreement, authorized Credit Suisse, the agent bank, to lend the State's securities to broker-dealers and banks pursuant to a form of loan agreement. During the fiscal year, the agent bank lent, at the direction of the State Treasurer, the State's securities and received cash (United States) as collateral. Borrowers were required to deliver collateral for each loan equal to (i) in the case of loaned securities denominated in United States dollars or whose primary trading market was located in the United States or sovereign debt issues by foreign governments, 102% of the market value of the loaned securities; and (ii) in the case of loaned securities not denominated in United States dollars or whose primary trading market was not located in the United States, 105% of the market value of the loaned securities.

The State Treasurer did not impose any restrictions during the fiscal year on the amount of the loans that the agent bank made on its behalf. The agent bank indemnified the State by agreeing to purchase replacement securities, or return cash collateral in the event the borrower failed to return the loaned securities or pay distributions thereon, due to the borrower's insolvency. There was one such failure by a borrower during the fiscal year, Lehman Brothers, Inc. (September 2008). However, there were no losses during the fiscal year resulting from the default of the borrower. As the agent bank, Credit Suisse has indemnified the State and has actively been replacing all outstanding loans with Lehman Brothers.

<sup>\*\*\$746.0</sup> million disclosed in this column consists of international real estate investments held by the pension trust funds.

Under Master Securities Lending Agreements between the State and each borrower, the State Treasurer and the borrowers have the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested in assets held in a collateral account. As of September 30, 2008, the investments had an average weighted maturity to next reset of 31 days and an average weighted maturity of 3.3 years. Because the loans were terminable at will, their duration did not generally match the duration of the investments made with cash collateral. At September 30, 2008, the retirement systems had no credit risk exposure to borrowers. The cash received for securities on loan for the State as of September 30, 2008, was \$8.9 billion. The fair market value of assets held in the dedicated collateral account at managed by Credit Suisse and held by the custodian for the State as of September 30, 2008, was \$6.8 billion. The carrying amount, which is the fair market value, of securities on loan for the State as of September 30, 2008, was \$8.7 billion.

At September 30, 2008, the pension trust funds had the following debt investments made from cash received as collateral for securities lent:

	Debt Investment	ts (in millions)		
	Fair Value	Rating S & P	Fair Value	Rating Moody's
Securities Lending Collateral	\$ 2,081.7	AAA	\$ 2,138.8	Aaa
	1,778.8	AA	2,016.3	Aa
	1,842.9	Α	1,578.1	Α
	475.9	BBB	754.7	Baa
	94.0	BB	4.4	Ba
	20.2	В	71.9	В
	20.0	D	-	D
	519.0	Unrated	268.4	Unrated
Total	\$ 6,832.4		\$ 6,832.4	

#### **Deposits and Investments - Discretely Presented Component Units**

### **Deposits**

At year-end, the carrying amount of discretely presented component units deposits, excluding those classified as investments, was \$576.4 million. The deposits were reflected in the accounts of the banks at \$562.0 million. Of the bank balance, \$510.3 million was uninsured and uncollateralized and therefore exposed to custodial credit risk.

#### Investments

The investment authority for most discretely presented component units is typically found in their enabling statutes and/or their bond resolutions where applicable. Those component units that are financing authorities generally may invest in government or government-backed securities and deposits. The Michigan Education Trust's investments are subject to an investment agreement with the State Treasurer that allows the Treasurer, acting as agent, to make diverse investments including stocks, bonds, notes, and other investments. Investment policies for the State universities are typically set forth by their governing boards and include a broad range of investment types.

#### **Restricted Assets**

Restricted investments on the government-wide Statement of Net Assets, totaling \$429.5 million, represent amounts that are pledged toward the payment of outstanding bonds and notes.

The following table summarizes the investment maturities reported by the discretely presented component units (in millions):

			Investment Maturities (In Years)									
	Fair Value		Less Than 1 1 To 5		6 T	o 10	Th	More Than 10		/A		
: Time deposits	\$	115.1	\$	114.7	\$	.4	\$	_	\$	_	\$	_
Money market accounts		548.7		548.7		-		-		-		-
Commercial paper		402.8		402.8		-		-		-		-
Short-term notes		76.4		76.4		-		-		-		-
Repurchase agreements		.5		-		-		.5		-		-
Government securities		956.6		559.4		165.1		183.6		48.5		-
Insured mortgage backed securities		338.7		-		1.4		.6	(	336.7		-
Government-backed securities		333.0		135.5		.2		15.9	•	181.5		-

Investment agreements	15.1	6.7	_	_	8.4	_
Corporate bonds and notes	239.9	114.0	70.2	47.7	8.0	_
Preferred stock	.9	-	-	-	.9	-
Equities	84.5	33.1	.5	-	1.4	49.5
Real estate	8.1	-	-	-	4.6	3.4
Venture capital & leveraged buyouts	43.2	-	-	37.6	5.7	-
Mutual bond/equity funds	1,120.5	197.2	80.5	104.7	290.5	447.7
Guaranteed investment contracts	1,022.3	91.7	19.3	1.5	909.8	-
Pooled investment funds	38.2	38.2	-	-	-	-
Other investments	54.6	8.1	1		45.9	5_
Total Investments	\$ 5,399.2	\$ 2,326.5	\$ 337.7	\$ 392.0	\$ 1,841.9	\$ 501.2
Less Investments Reported as "Cash" on Statement of Net Assets	666.5					

666.5

**Total Investments** 

\$ 4,732.7

# As Reported on Statement of Net Assets

Current investments \$ 1,405.8 Noncurrent restricted investments 429.5 Noncurrent investments 2,897.4 **Total Investments** \$ 4,732.7